

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Withdrawn) A computing device in communication with an implantable device for delivering therapy to a patient, the implantable device having a monitor module configured to monitor at least one parameter of the implantable device, the computing device comprising in combination:

(a) a drug scheduling module for determining whether an appointment is necessary to service the implantable device based upon the parameter from the monitor module;

(b) a memory for storing therein the scheduling module and at least one scheduling preference; and

(c) a telemetry module providing bi-directional communication between the computing device and the implantable device.

2. (Withdrawn) The computing device of claim 1, wherein the drug scheduling module determines whether an appointment is necessary to perform the service selected from the group consisting of a software update, a software modification, a pump refill, and a power supply recharge.

3. (Withdrawn) The computing device of claim 1, wherein the parameter is a drug usage parameter selected from the group consisting of a quantity drug consumed, a rate in which drug is being consumed, and an estimated date that drug will be exhausted.

4. (Withdrawn) The computing device of claim 1, wherein the scheduling module receives data from the implantable device, wherein the data is selected from the group consisting of drug usage information, drug management instructions, pump manufacturer requirements, and drug management data.

5. (Withdrawn) The computing device of claim 4, wherein the drug management instructions is selected from the group consisting of order a drug delivery device refill kit, notify

primary care physician of drug order, notify specialty care physician of drug order, notify drug pharmacy to order drug, notify patient's employer of drug order, deliver drug to a specified location, and bill drug to a payer.

6. (Withdrawn) The computing device of claim 1, wherein the scheduling module receives drug management data selected from the group consisting of name of drug manufacturer, date drug was manufactured, and name of pharmacy carrying the drug.

7. (Withdrawn) The computing device of claim 1, wherein the scheduling module includes a drug management algorithm to forecast when a next refill of pump reservoir is required.

8. (Withdrawn) The computing device of claim 1, further comprising an appointment scheduling module for arranging an appointment to service the implantable device.

9. (Withdrawn) The computing device of claim 8, wherein the appointment scheduling module is capable of contacting at least one entity for the appointment, wherein the entity is selected from the group consisting of a pharmacy, a caregiver, a physician, a hospital, and the patient.

10. (Withdrawn) The computing device of claim 9, wherein the computing device is operatively coupled to the entity via a computing network.

11. (Withdrawn) The computing device of claim 10, wherein the computing network is an Internet.

12. (Currently amended) An implantable drug delivery device for delivering at least one drug to a patient comprising in combination:

- (a) at least one reservoir each containing at least one drug;
- (b) a drug scheduling module for determining whether the drug should be replenished;
- (c) an appointment scheduling module automatically initiated by the drug scheduling module ~~for automatically~~, and without scheduling input contemporaneously

provided by the patient, for automatically scheduling an appointment to replenish the drug in the device; and

(d) a telemetry module providing bi-directional communications with an external device for allowing the appointment scheduling module to schedule the appointment,

wherein the drug scheduling module receives data about the implantable drug delivery device, wherein the data is selected from the group consisting of drug usage information and drug management data.

13. (Original) The implantable drug delivery device of claim 12, wherein the appointment scheduling module contacts via the external device at least one entity for the appointment, wherein the entity is selected from the group consisting of a pharmacy, a caregiver, a physician, a hospital, and the patient.

14. (Previously Presented) The implantable drug delivery device of claim 12, the drug scheduling module further receives drug management instruction.

15. (Original) The implantable drug delivery device of claim 14, wherein the drug management instructions is selected from the group consisting of order a drug delivery device refill kit, notify primary care physician of drug order, notify specialty care physician of drug order, notify drug pharmacy to order drug, notify patient's employer of drug order, deliver drug to a specified location, and bill drug to a payer.

16. (Original) The implantable drug delivery device of claim 12, wherein the drug scheduling module receives drug management data selected from the group consisting of name of drug manufacturer, date drug was manufactured, and name of pharmacy carrying the drug.

17. (Original) The implantable drug delivery device of claim 12, wherein the drug scheduling module includes a drug management algorithm to forecast when a next refill of pump reservoir is required.

18. (Original) The implantable drug delivery device of claim 12, wherein the appointment scheduling module is capable of contacting at least one entity for the appointment, wherein the entity is selected from the group consisting of a pharmacy, a caregiver, a physician, a hospital, and the patient.

19. (Previously Presented) The implantable drug delivery device of claim 18, wherein the implantable drug delivery device is in communication with a computing device, the computing device operatively coupled to the entity via a computing network.

20. (Original) The implantable drug delivery device of claim 19, wherein the computing network is an Internet.

21. (Currently amended) An implantable drug delivery device having a patient scheduling feature, comprising:

- (a) a housing;
- (b) a drug reservoir carried in the housing configured to contain a therapeutic substance;
- (c) a flow control coupled to the drug reservoir for controlling the flow of the therapeutic substance from the drug reservoir through an infusion port;
- (d) electronics coupled to the flow control and a power source;
- (e) a telemetry module coupled to the electronics;
- (f) memory coupled to the electronics, the memory containing pump scheduling criteria and other scheduling criteria;
- (g) a monitoring module coupled to the memory and the electronics that monitors at least one pump operation variable; and,
- (h) a scheduling module coupled to the memory and the electronics, the scheduling module configured to calculate at least one relationship among the pump scheduling criteria and monitored pump variables, the scheduling module configured to decide automatically and without scheduling input contemporaneously provided by the patient whether an appointment is required, and the scheduling module configured to activate the telemetry module to schedule an appointment, wherein the scheduling

module is adapted to contact via the telemetry module at least one entity for the appointment scheduling automatically, and without scheduling input contemporaneously provided by the patient, wherein the at least one entity ~~being~~ is selected from the group consisting of a pharmacy, a caregiver, a physician, and a hospital.

22. (Original) The implantable drug delivery device of claim 21, wherein the scheduling module determines whether an appointment is necessary to perform a service selected from the group consisting of a software update, a software modification, a pump refill, and a power supply recharge.

23. (Original) The implantable drug delivery device of claim 21, wherein the scheduling module communicates via the telemetry module with an external device.

24. (Previously Presented) The implantable drug delivery device of claim 21, wherein the scheduling module contacts via the telemetry module the patient for the appointment scheduling.

25. (Previously Presented) The implantable drug delivery device of claim 23, wherein the implantable drug delivery device is in communication with a computing device operatively coupled to the entity via a computing network.

26. (Original) The implantable drug delivery device of claim 25, wherein the computing network is an Internet.

27. (Withdrawn) A method for scheduling activities to support an implantable drug delivery device, comprising:

- (a) establishing scheduling criteria;
- (b) monitoring pump variables;
- (c) calculating at least one relationship among pump scheduling criteria, other scheduling criteria and monitored pump variables;
- (d) deciding whether a pump scheduling activity should be reported;

(e) reporting the pump scheduling activity from the implantable drug pump into a communications medium; and,

(f) scheduling the pump scheduling activity with a party.

28. (Withdrawn) The method of claim 27, wherein the step of deciding includes the step of determining whether an appointment is necessary to perform a service selected from the group consisting of a software update, a software modification, a pump refill, and a power supply recharge.

29. (Withdrawn) Computer executable instructions for performing the steps recited in claim 27.

30. (Withdrawn) The method of claim 27, wherein the step of monitoring pump variables includes the step of monitoring at least one drug usage parameter selected from the group consisting of a quantity drug consumed, a rate in which drug is being consumed, and an estimated date that drug will be exhausted.

31. (Withdrawn) The method of claim 27, wherein the step of establishing scheduling criteria includes the step of obtaining scheduling data selected from the group consisting of drug usage information, drug management instructions, pump manufacturer requirements, and drug management data.

32. (Withdrawn) The method of claim 31, wherein the drug management instructions is selected from the group consisting of order a drug delivery device refill kit, notify primary care physician of drug order, notify specialty care physician of drug order, notify drug pharmacy to order drug, notify patient's employer of drug order, deliver drug to a specified location, and bill drug to a payer.

33. (Withdrawn) The method of claim 27, wherein the step of establishing scheduling criteria includes the step of obtaining drug management data selected from the group consisting of name of drug manufacturer, date drug was manufactured, and name of pharmacy carrying the drug.

34. (Withdrawn) The method of claim 27, wherein the step of deciding whether a pump scheduling activity should be reported is performed by a drug management algorithm.

35. (Withdrawn) The method of claim 27, wherein the step of scheduling the pump scheduling activity with a party is performed by an appointment scheduling module.

36. (Withdrawn) The method of claim 27, wherein the step of scheduling the pump scheduling activity includes the step of contacting the party selected from the group consisting of a pharmacy, a caregiver, a physician, a hospital, and the patient.

37. (Withdrawn) The method of claim 36, wherein the step of contacting is performed via a computing network.

38. (Withdrawn) The method of claim 36, wherein the step of contacting is performed via an Internet.

39. (Previously Presented) The implantable drug delivery device of claim 12, wherein the appointment scheduling module comprises a scheduling management algorithm capable of being enabled by the drug scheduling module to initiate the automatic scheduling of an appointment.

40. (Previously Presented) The implantable drug delivery device of claim 39, wherein the scheduling management algorithm receives predetermined scheduling preferences upon being enabled to initiate the automatic scheduling of an appointment.

41. (Previously Presented) The implantable drug delivery device of claim 40, wherein the predetermined preferences are selected from the group consisting of a number of days prior to pump reservoir drug depletion before the pump is refilled, date and time preferences of the pump refill technician or physician, date, time and place preferences of the patient and a caregiver, date, time and availability of clinic rooms, the proximity of a clinic to the patient and pump refill technicians, holiday and work schedules, a pharmacist's delivery timeline, and availability of back-up hospital staff.

42. (Previously Presented) The implantable drug delivery device of claim 12, wherein the appointment scheduling module records whether all entities being scheduled have acknowledged acceptance of the scheduled appointment.

43. (Previously Presented) The implantable drug delivery device of claim 12, wherein the appointment scheduling module searches for another appointment time in the event that not all entities being scheduled have acknowledged acceptance of the scheduled appointment.

44. (Previously Presented) The implantable drug delivery device of claim 21, wherein the appointment scheduling module comprises a scheduling management algorithm capable of being enabled to initiate the automatic scheduling of an appointment.

45. (Previously Presented) The implantable drug delivery device of claim 44, wherein the scheduling management algorithm receives predetermined scheduling preferences upon being enabled to initiate the automatic scheduling of an appointment.

46. (Previously Presented) The implantable drug delivery device of claim 45, wherein the predetermined preferences are selected from the group consisting of a number of days prior to pump reservoir drug depletion before the pump is refilled, date and time preferences of the pump refill technician or physician, date, time and place preferences of the patient and a caregiver, date, time and availability of clinic rooms, the proximity of a clinic to the patient and pump refill technicians, holiday and work schedules, a pharmacist's delivery timeline, and availability of back-up hospital staff.

47. (Previously Presented) The implantable drug delivery device of claim 21, wherein the appointment scheduling module records whether all entities being scheduled have acknowledged acceptance of the scheduled appointment.

48. (Previously Presented) The implantable drug delivery device of claim 21, wherein the appointment scheduling module searches for another appointment time in the event



that not all entities being scheduled have acknowledged acceptance of the scheduled appointment.